

**Amendments to the Drawings:**

The attached sheet includes changes to Fig. 15 and replaces the original sheet with Fig. 15. In Fig. 15, the term --Prior Art-- has been added.

Attachments: (1) Replacement Sheet

(1) Annotated sheet showing changes

### REMARKS

Applicants would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office Action, and these remarks provided in response thereto.

Claims 1–22 were objected to for use of the phrase “restart a starting step of equalizing steps,” which the Examiner considers confusing and awkward. Claims 1, 8, 11, 14, 17 and 20 have been amended to change the phrase to the language suggested by the Examiner, and to thereby obviate the objection.

The Examiner has required that “wave form” in claim 8 be changed to --waveform-- . Claim 8 has been amended accordingly. Claims 12, 16 and 20 have also been amended to replace “wave form” with --waveform-- .

Claims 10, 13, 16, 19 and 22 were objected to for lack of antecedent basis for the phrase “said operation”. The claims have been amended appropriately to obviate the objection. Claim 3 has also been amended in a similar fashion.

The Examiner is requiring that Figure 15 be designated by a legand such as --Prior Art-- because only that which is old is illustrated. Figure 15 is amended appropriately herein.

Claims 1–5 and 8–22 were rejected under 35 U.S.C. 103(a) over Applicant Admitted Prior Art in view of U.S. Patent No. 5,517,213 to Bhatt et al. (hereinafter “Bhatt”). For the following reasons, the rejection is respectfully traversed.

The Examiner acknowledges that AAPA does not teach a tap coefficient monitoring unit as claimed. Thus, Bhatt is relied upon for teaching this limitation.

Regarding claims 1 and 2, Bhatt does not teach or suggest “a tap coefficient monitoring unit which monitors a tap coefficient of said equalizing filter unit, and changes the tap arrangement of said equalizing filter unit so as to restart . . . equalizing . . . , depending upon a

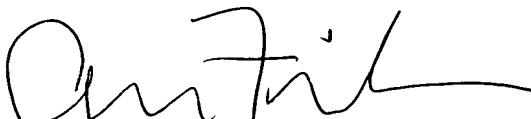
change state of the tap coefficient used *while the reception signal is equalized*,” as required. Similarly, regarding claims 3 and 9, Bhatt does not teach or suggest “a tap coefficient monitoring unit which monitors a tap coefficient of said equalizing filter unit, and changes the tap arrangement of said equalizing filter unit so as to restart reception signal equalizing steps . . . , depending upon a change state of the tap coefficient *during the equalization of said reception signal*,” as required. Claims 8 and 10–22 have similar limitations. Bhatt discloses a blind equalization process (200) which, at step 218, is reinitiated if the tap coefficients have not converged. Only once the coefficients have been reached does the adaptive equalization process start (at step 220). In contrast, claims 1–3 and 8–22 require that when the monitoring unit detects that a tap coefficient has been changed *while the reception signal is being equalized*, equalizing is restarted. The reinitiating of the blind equalization process (200) at step 218 as taught by Bhatt is not performed *while a reception signal is being equalized*, as in claims 1–3 and 8–22. Rather, if the tap coefficients are not converged at step 218, the process does not proceed to step 220, where the signal is equalized, but instead the blind equalization process (200) is restarted. Thus, the blind equalization process (200) taught by Bhatt relates to setting up tap coefficients of a filter *prior* to starting the adaptive equalization process (220). Therefore, Bhatt does not teach or suggest restarting a starting step of *while the reception signal is equalized*, as in claims 1–3 and 8–22. Since every limitation of the claim is not taught or suggested by AAPA, Bhatt or any combination thereof, claims 1–3 and 8–22 are patentable over the prior art of record. Further, since claims 4 and 5 depend from claims 1–3, they are patentable for the same reasons.

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Amdt. Dated October 28, 2005  
Reply to Office Action of August 19, 2005

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 33152.

Respectfully submitted,

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FIG. 15  
~ PRIOR ART ~

